The GEFTF project "Sustainable Land Management for Increased Productivity in Armenia"
(SLMIP)
Terms of Reference

REVIEW OF AGROFORESTRY MEASURES IN SELECTED AREAS AND SELECTION OF NEW LANDS

**(PREPARING A DETAILED LAND RESTORATION REPORT
FOR INVESTMENTS IN LANDSCAPE
RESTORATION INTERVENTIONS)**

"Rural Areas Economic Development Programme Implementation Unit" SA of Ministry of Economy of the Republic of Armenia seeks a Consulting Firm for the assignment of technical **land restoration service provider (LRSP)** for preparing a Landscape restoration report to serve as a basis for the implementation of investments for landscape restoration interventions under the internationally funded rural development project: Sustainable Land Management for Increased Productivity in Armenia (SLMIP).

Background of the Post

Armenia is a land-locked republic in the Southern Caucasus, bordered by Turkey, Iran, Georgia, and Azerbaijan. It's mainly mountainous territory covers an area of 29 800 km^2 that is administratively divided into 11 marzes (regions, including the capital Yerevan) and 915 communities (hamaynkner, singular hamaynk), of which 49 are urban and 866 are rural communities. About 40% of the country is not suitable for agriculture. The area suitable for agriculture comprises 1.39 million hectares of which 35% is arable agricultural land and very dependent on irrigation. The remainder is grasslands and pastures and perennial plantations.

As part of the recent comprehensive Armenia Development Strategy 2012-2025 (ADS), the Government of Armenia acknowledged that agriculture and rural development plays a key role in economic diversification, job creation, and poverty reduction. The Strategy focus on sustainable agriculture, by promoting soil conservation measures, improving water collection and irrigation methods, limiting the use of fertilizers and other agro-chemicals, and improving pasture management. The Strategy also aims to forecast and mitigate the effects of natural disasters, as well as implement measures to mitigate the impacts of climate change.

In this context IFAD launched the Infrastructure and Rural Finance Support Programme (IRFSP) to assist the Government to resolve the widespread occurrence of poverty in the rural areas. Its overall objective is to improve the economic and social status of the population in selected rural areas where poverty is prevalent, by rehabilitating tertiary irrigation infrastructure, generating income growth and sustainable employment opportunities through strengthening the agricultural production systems and the forward and backward linkages of value chains for cash crops. The IRFSP Programme will be implemented over six years, starting in 2016.

The GEFTF project "Sustainable Land Management for Increased Productivity in Armenia" (SLMIP) builds on the IRFSP baseline programme and is fully blended with it, in order to integrate soil and water conservation measures in the development of the targeted high value agroforestry and vegetable crops, and restore the resilience to land degradation and climate-risks of the agro-ecosystems and the rural population in the project communal lands. The overall objective of the SLMIP project is "to enhance the overall resilience of rural communities living in risk-prone areas of Armenia", while the specific objective is "to increase income and assets generated by smallholder farmers through investments in sustainable land management systems and technologies". The GEFTF/SLMIP strategy is based on the following intervention lines:

Component 1 – Investments in sustainable farming systems and technologies. The project will mainstream the adoption of climate-proof technologies in the tertiary irrigation systems rehabilitated by the baseline interventions, and support the conversion of marginal communal lands into climate-resilient agroforestry plantations, managed with efficient irrigation technologies and soil and water conservation agronomic systems and to improve the resilience of the baseline agriculture production interventions. Moreover, this component will specifically target women groups and support them with start-up packages to help diversify their livelihoods in the family farmland plots to increase their food and nutritional security.

Component 2 – Community-led land degradation prevention through landscape restoration interventions. The project will adopt an ecosystem-based landscape approach to identify vulnerable sites to land degradation and implement integrated landscape restoration interventions to enhance the functionality and durability of the irrigation schemes, prevent soil erosion degradation, and improve vegetation cover along water courses, catchment areas and mountain slopes. The final goal is to restore the environmental services supporting rural development in the target areas, and provide environmental, social and economic benefits from multipurpose restoration interventions. This component will also create opportunities for income diversification from the production, processing and marketing of wild products, such as those derived from beekeeping, supporting the creation and strengthening of youth associations making an economic use of the restored communal lands.

Component 3 – Enabling environment to enhance the capacity of smallholder farmers against land degradation. The project will create an enabling environment to enhance the capacity of smallholder farmers, decision makers and all relevant actors, to incorporate good practices in agriculture production and landscape restoration that help mitigate desertification and land degradation problems. Training programmes will be designed and implemented for women and youth. This component will also assess current policies and regulations, and crosscutting sectoral issues that may facilitate or prevent the adoption of sustainable farming systems and landscape restoration measures to mitigate land degradation and climate-risks, and propose policy recommendations.

Purpose and Objectives of the assignment

LRSP is expected to prepare a detailed Land Restoration report. The report should be a comprehensive study including:

A. Revision of the existing 3 restoration and investments plans prepared for the preselected sites in Syunik and Ararat marzes of the Republic of Armenia;
  - Identification the need of restoration activities in the selected areas and consequently - approval or revision of selected sites from the action.

B. Identification of new candidate restoration sites, mapping and development of investment plans advising on the types of investments per site, the bills of quantity, the implementation process and the involvement of the community.

C. Implementation Assistance

Scope of work

The **LRSP** will support the GEF SLMIP implementation by providing a detailed landscape restoration report/study. The recommendations of the study should adhere to the GEF component purpose and approved documents. **LRSP** will have to work closely with the PIU GEF coordinator in revising the approach and explore/define the eligible actions and types of land restoration per site (e.g. restoration of pastoral and silvo-pastoral land, anti-erosion techniques). As stated in the GEF design document and in order to reach more municipalities and beneficiaries and generate the expected Global Environment Benefits, the activity should be located within the Armenia – Infrastructure & Rural Financial Services Programme, GEF eligible areas, on communal land in sites that do not have any land tenure related issue and conflicts. The SECAP guidelines will have to be observed in this process. The scope of the assignment includes 3 key tasks, such as:

  A. Revision of the restoration and investments plans

Land Restoration reports for 3 areas (7ha in Spandaryan settlement of Gorayq community, 44.3 ha in Harzhis settlement of Tatev community of Syunik and 10 ha in Nor Ughi community, Ararat province)

were prepared by the Service Providers. The Restoration reports provide detailed mapping, restoration and investment plans for the selected areas. However, the recent IFAD MTR mission noticed that the approach for land restoration activities detailed in the documents (restoration plans and bills of quantities) is not adequate, partly because some of the proposed actions are not eligible under GEF 6 (e.g. purchase and use of inorganic fertilizer in plantation). Furthermore, the evaluated total cost of the proposed land restoration activities in the 3 selected areas would greatly exceed the initial budget for this activity and would therefore limit its reach out to less than 10% of the GEF target as endorsed in the CEO document (880 ha). In this context **LRSP** is required to:

- Review the existing restoration reports including   proposed works, restoration methods and the investment costs
- Advise whether the initial 3 sites could be maintained in the action
- Revise the restoration reports in compliance with GEF 6 requirements
- Agree the revised restoration plans with the beneficiary communities
- Advise the PIU on the implementation arrangements for the revised restoration plans (including revision of the MOUs signed with the communities, preparing TORs and bidding packages for hiring service providers and any assistance the PIU and the GEF Coordinator may require to launch the implementation of restoration interventions for the mentioned land plots).

B. **The identification of candidate restoration sites**

The GEF SLMSP target for the restoration of degreased lands is 880 ha. So far about 60 ha was preselected for restoration under the Project. According to the GEF CEO endorsed document the selection of the vulnerable sites is a continuous process and should be launched upon the demand and availability of the funds. In this context **LRSP** is required to:

- Create site selection criteria in contact with GEF coordinator
- Justify the selection criteria
- Identify vulnerable sites and the root-causes of land degradation, describe the baseline of state of the art (natural condition) of the chosen ones.
- Select suitable sites for establishing and/or rehabilitating agro-forestry crops within communal land plots formerly dedicated to agriculture, pasture and/or wild herb collection that are not any longer (or potentially under the threat) viable for production because of clear and evident degradation problems. The site selection process should be based on experts' opinions, and land environmental historical ecological data and consider sites with land degradation problems that do not exceed the threshold that prevents the planting and cultivation of trees.
- The selection criteria should follow the SLM Project and the IUCN Restoration of Capacity Assessment Method (ROAM) according to the environmental – soil and climate features, land conservation status, and climate-risks, human created/intervened environmental issues and socio-economic context.
- Map the identified sites and provide baseline information with detailed GIS mapping system, historical data on plant species abundant in the selected areas
- Sort the selected areas in categories based on historical plant species data, slopes (affecting potential rate for restoration success), land use typology (pasture/herb collection/agriculture/combined/mixed/etc.), soil type, climatic conditions (precipitation data altitudes etc).
- Acquire data on land degradation in Armenia from nationally acting local or international organizations, including: Ministry of Environment, National Academy of Sciences other state agencies, NGOs, organizations etc.
- Develop restoration plans by providing justification for proposed LR approach(es) per selected

site categories, identifying land degradation types and extent, demonstrating the need for protection, management and active restoration interventions; identifying innovative technologies, agro-forestry systems and practices for landscape restoration in communal lands; providing summaries on environmental, institutional, policy/legislation, and socio-economic aspects including:

    a. production and/or selection of high quality seeds and seedlings from a wide range of native species in accordance to species natural for the selected sites, based massively on historical data

    b. effective and/or innovative soil preparation, and effective/innovative re-cultivation techniques

    c. effective site protection management techniques

         • The most innovative agronomic systems and technologies - such as conservation agriculture, organic agriculture, integrated pest management, and integrated livestock-tree crop management - for improving soil management and water saving practices as well soil recovery (possibly contributing to soil fertility)

    d. Sites where re-cultivation activities include tree planting and/or are bordering with natural forests, biodiversity important areas, biodiversity hotspots etc., create the development plan in close contact with Ministry of Environment of RA.

- Develop investment plan for each selected site or site category (e.g. initial investments, time period until the investment will be amortized /where possible/, expected yields per hectare and year until the crop becomes fully productive, management and maintenance needs), processing plan (e.g. expected products to diversify production), and marketing plan (e.g. market analysis of selected species/varieties (if commercial species), with expected potential benefits per kg per product according to local and non-local market opportunities, etc).

    - The investment plans should report on the direct and indirect economic benefits of land restoration interventions (cost-benefit analysis), documented through concrete examples that are relevant to the Armenian context, UNFCCC Paris Agreement, CBD, UNCCD, SDGs, etc.

C. Implementation assistance:
1. Provide capacity support to the local authorities and final beneficiaries during the identification of the needs and restoration interventions
2. Work closely with project staff members, other service providers (i.e. national and international), partners, donor organizations and stakeholders to facilitate the fulfillment of the restoration plans
3. Provide communication input to project activities where required;
4. Support the M&E team to establish baseline for the selected sites, to set up geo-referenced profiles and databases about key investments archived with common GIS software (ArcGIS or QGIS).

D. Experts (estimated at 17 man-months in total including all the man-months allocated for all experts)

The consultant will be required to mobilize the following key experts:

A. *Project manager with proven experience in related field*
- Minimum of 5 years of experience in related field general professional experience
- Previous experience in the management of donor-funded projects
- Proficient in English and Armenian Languages

- Excellent communication, coordination, leadership and problem solving skills
- Minimum of a first level university degree in a relevant domain

B. *Soil management specialist*
- Minimum of 3 years of experience in related field general professional experience, preferably with experience in rural areas of Armenia.
- Proficiency in Armenian Language and good knowledge of English is an advantage.
- Minimum of a Bachelor's degree or equivalent university degree in a relevant domain.

C. *Plant Biology/Botany Specialist*
- Minimum of 3 years of **experience in related field** general professional experience, preferably with experience in rural areas of Armenia.
- Proficiency in Armenian Language and good knowledge of English is an advantage.
- Minimum of a first level university degree in a relevant domain.

D. *Mapping/GIS Specialist*

- Minimum of 3 years of professional experience in Mapping/GIS related action.
- Present samples of previous works –minimum 2 works.
- Proficiency in Armenian Language and good knowledge of English is an advantage.
- Minimum of a first level university degree in a relevant domain.

In addition, the LRSP is expected to mobilize all necessary short-term experts in the requisite qualifications and quantities to ensure the successful implementation of the project.

Level of input
The LRSP will be given a 12 months contract. The value, payment method and timeframes for LRSP shall be specified in the contract among PIU and LRSP.

Schedule of Reports and Deliverables
The LRSP **will report to the GEF coordinator who is responsible for coordinating and supervising this assignment.**
- The LRSP will report to the GEF coordinator according to the AWP prerequisites that fall within the period of assignment.
- The LRSP shall submit as part of their proposal the methodology for implementing the assignment and a schedule of proposed and planned activities for preparation of milestones and meeting the deadlines.
- Regular monthly reporting, including:
    - Revision report of 3 preselected sites within first month of the action
    - Site selection criteria within the 2nd month of the action
    - Site selection (candidate sites) report of at least 100 hectares of land to be recultivated/recovered within the 3rd month of the action
    - Investment plan for proposed sites within the 3rd month of the action
    - Starting 4th to – 11th month of the action deliver at least ~100 hectares of candidate site including relative investment plan/reports
    - Candidate site report of leftover hectares by 12th month of the project (to be less than 100 hectares)
    - Final Report by 12th month of action
- The reports shall be presented in both Armenian and English.

Services to be provided by the Client

The Client will provide LRSP with all the required infrastructure, material, and arrangements for the successful completion of the assignment tasks, which include:

1. All existing maps and surveys.
2. List of prioritized areas/regions
3. Priority of works to be planned
4. Any additional (deliverable) documentation and/or supervision to the LRSP